

ABSTRACT

There is provided a supercapacitor with a significantly reduced internal resistance. The supercapacitor comprises two electrodes in which each of the two electrodes is comprised of a current collector and an electrode active material adhered to the current collector, a separator positioned between the two electrodes, an electrolyte and a package, wherein the current collector is a metal thin plate having a conductive metal oxide layer thereon and the electrode active material is adhered on a surface of the conductive metal oxide layer. The supercapacitor according to the present invention has a significantly reduced internal resistance and a highly enhanced charge capacitance.